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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,463	01/17/2002	Laura Dickey	100200145-1	3691

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EXAMINER
BUI, HANH THI MINH

ART UNIT	PAPER NUMBER
2192	

NOTIFICATION DATE	DELIVERY MODE
06/11/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/053,463	DICKEY ET AL.	
	Examiner	Art Unit	
	HANH T. BUI	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. In view of the Appeal Brief filed on March 23rd, 2009, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

2. A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 6, 7, 10-14, and 18-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. ***Claim 2*** recites the limitation "installing of *said application…*" in line 2. There is insufficient antecedent basis for this limitation in the claim. For compact prosecution, examiner treats as -- installing of said concentrated application --.

b. ***Claim 6*** recites the limitation "installing of *said application* further comprises storing *said application* …" in line 2. There is insufficient antecedent basis for this limitation in the claim. For compact prosecution, examiner treats as -- installing of said concentrated application further comprises storing said concentrated application …--.

c. ***Claims 7, 18, 19*** recite the limitation "executing *said application* …" in line 2. There is insufficient antecedent basis for this limitation in the claims. For compact prosecution, examiner treats as -- executing said concentrated application --.

d. ***Claim 10*** recites the limitation "install *said application* …" in line 2. There is insufficient antecedent basis for this limitation in the claim. For compact prosecution, examiner treats as -- install said concentrated application --.

e. ***Claim 11*** recites the limitation "receive *said application* … store *said application …*" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. For compact prosecution, examiner treats as -- receive said unconcentrated application … store said unconcentrated application …--.

f. ***Claims 12 and 13*** recite the limitation "copy *said application* … prior to concentrating *said application …*" in lines 2-3. There is insufficient antecedent basis for this limitation in the claims. For compact prosecution, examiner treats as -- copy

said unconcentrated application … prior to concentrating said unconcentrated application …--.

g. ***Claim 14*** recites the limitation "install *said application* …" in line 2. There is insufficient antecedent basis for this limitation in the claim. For compact prosecution, examiner treats as -- install said concentrated application --.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, 4-5, 9-10, 12-13, 15-17, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Fish (Pub. No. 2002/0063641 - hereinafter, Fish – art made of record).

Regarding claim 1:

Fish discloses *a method of installing an application on a target electronic device, said method comprising:*

- *receiving said application in said target device in unconcentrated form;*

(FIGS. 1, 3, 6 and associated text, such as, "the compressor module 100 receives an incoming stream of uncompressed data 102 ***(application in unconcentrated form)***" (emphasis added – See par. [0034]).

"The compressor module 100 may be implemented as a software module executed by a general purpose computer 300, as shown in FIG. 3" (See par. [0041]).

"the compressor module 100 receives an input data stream 612 that is to be encoded. The input data stream 612 is an uncompressed stream of computer readable data." (See par. [0050])).

- *concentrating said application in said target device* ***(compressor module 100)****; and*

- *installing said concentrated application in concentrated form in non-volatile memory of said target device.*

(FIGS. 3, 6 and associated text, such as, "the compressor module 100 may be employed to ***compress*** a stream of uncompressed or raw data 102, such as disc drive operating code data, for delivery to, and storage in, a memory in the disc drive 320 ***(installing in memory)***. In the system shown in FIG. 3, operating code for the disc drive 320 is input to the computer 300, which, in turn, employs the compression module 100 to ***compress*** the operating code for ***transmission to the disc drive***" (emphasis added – See par. [00041]).

"The compressor module 100 ***encodes*** the input data stream 612 using the unique dual-mode compression scheme described herein, and outputs a compressed file 620 ***(concentrated application in concentrated form)***. The ***compressed file 620***

represents a ***compressed form*** of the input data stream 612 and, importantly, is substantially smaller than the input data stream 612." (Emphasis added – See par. [0050]).

"The compressed file 620 ***(concentrated application in concentrated form)*** is made up of three data sets … While the three files 614, 616, and 618 are illustrated as being sequential and distinct in the compressed file 620, it is to be understood that the compressed file 620 may be stored in anywhere memory" (See par. [0051]).

"a compressed operating code file (such as 620) ***(concentrated application in concentrated form)*** stored ***(install)*** in non-volatile memory (such as 524)" (emphasis added – See par. [0106])).

Regarding claim 2:

Fish discloses *the method of claim 1, wherein said concentrating and installing of said application are contemporaneously performed.*

(FIGS. 3 and associated text, such as, "the compressor module 100 may be employed to ***compress*** a stream of uncompressed or raw data 102, such as disc drive operating code data, for delivery to, and storage in, a memory in the disc drive 320 ***(installing in memory)***. In the system shown in FIG. 3, operating code for the disc drive 320 is input to the computer 300, which, in turn, employs the compression module 100 to ***compress*** the operating code for ***transmission to the disc drive***" (emphasis added – See par. [00041])).

Regarding claim 4:

Fish discloses *the method of claim 1, further comprising copying said application from non-volatile memory of said target device to volatile memory of said target device prior to said concentrating of said application.*

("Non-volatile memory components, such as ROM or flash RAM, etc., are typically incorporated in disc drives for the storage of the operating code of the disc drive. Upon the start of the drive, portions of the disc drive operating code that must be accessed quickly, are typically ***transferred from the ROM or flash RAM to volatile memory*** (such as standard RAM) in the disc drive" (emphasis added – See par. [0003])).

Regarding claim 5:

Fish discloses *the method of claim 1, further comprising copying said application from a non-volatile removable data storage device to volatile memory of said target device prior to said concentrating of said application.*

("Non-volatile memory components, such as ROM or flash RAM, etc., are typically incorporated in disc drives for the storage of the operating code of the disc drive. Upon the start of the drive, portions of the disc drive operating code that must be accessed quickly, are typically ***transferred from the ROM or flash RAM to volatile memory*** (such as standard RAM) in the disc drive" (emphasis added – See par. [0003])).

Regarding claim 9:

This is another program version of the rejected claim 1 above, wherein all the limitations of this claim have been noted in the rejection of claim 1.

Regarding claim 10:

The rejection of base claim 9 is incorporated. All the limitations of this claim have been noted in the rejection of claim 2.

Regarding claim 12:

The rejection of base claim 9 is incorporated. All the limitations of this claim have been noted in the rejection of claim 4.

Regarding claim 13:

The rejection of base claim 9 is incorporated. All the limitations of this claim have been noted in the rejection of claim 5.

Regarding claim 15:

This is another system version of the rejected claim 1 above, wherein all the limitations of this claim have been noted in the rejection of claim 1.

Regarding claim 16:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 2.

Regarding claim 17:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 4.

Regarding claim 20:

This is another electronic target device version of the rejected claim 1 above, wherein all the limitations of this claim have been noted in the rejection of claim 1.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fish in view of Girard (Pub. No. 2003/0084342 - hereinafter, Girard – art made of record).

Regarding claim 3:

Fish discloses *the method of claim 1,* but Fish does not explicitly teach:

- *receiving said application via a network with which said target device is communicating.*

However, Girard discloses in FIGS. 1, 4 and associated text, such as, "At processing block 450, the boot code ***(operating code/application)*** is ***downloaded*** from the ***boot server*** to computer system 120" (emphasis added – See par. [0043]).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Girard into the teachings of Fish because such combination would have provided a mechanism to improve authentication for remote management of a computer system as suggested by Girard (See par. [0014]).

Regarding claim 11:

The rejection of base claim 9 is incorporated. All the limitations of this claim have been noted in the rejection of claim 3.

9. Claims 6-8, 14, 18-19, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fish in view of Tonomura (Pub. No. 2003/0009596 – hereinafter, Tonomura – art made of record).

Regarding claim 6:

Fish discloses *the method of claim 1,* but Fish does not explicitly teach:

- *storing said application in concentrated form in a virtual machine data store.*

However, Tonomura discloses "its interpreter incorporated in the reception side terminal (CPU2), which corresponds to a virtual machine, is designed to directly … execute the ***compressed code strings of a virtual program*** in order to prevent the execution speed of the intermediate language from being reduced." (Emphasis added – See par. [0075]).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Tonomura into the teachings of Fish because such combination would have prevented the execution speed of the intermediate language from being reduced as suggested by Tonomura.

Regarding claim 7:

Fish discloses *the method of claim 1,* but Fish does not explicitly teach:

- *executing said application in concentrated form with a virtual machine running on said target device.*

However, Tonomura discloses "its ***interpreter*** incorporated in the reception side terminal (CPU2), which ***corresponds to a virtual machine***, is designed to directly … ***execute the compressed code strings of a virtual program*** in order to prevent the execution speed of the intermediate language from being reduced." (Emphasis added – See par. [0075]).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Tonomura into the teachings of

Fish because such combination would have prevented the execution speed of the intermediate language from being reduced as suggested by Tonomura.

Regarding claim 8:

Fish discloses *the method of claim 1,* but Fish does not explicitly teach:

- *executing said concentrated application prior to said step of installing.*

However, Tonomura discloses "its interpreter incorporated in the reception side terminal (CPU2), which corresponds to a ***virtual machine***, is designed to ***directly*** … ***execute the compressed code strings*** of a virtual program in order to prevent the execution speed of the intermediate language from being reduced." (Emphasis added – See par. [0075]).

It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Tonomura into the teachings of Fish because such combination would have prevented the execution speed of the intermediate language from being reduced as suggested by Tonomura.

Regarding claim 14:

The rejection of base claim 9 is incorporated. All the limitations of this claim have been noted in the rejection of claim 6.

Regarding claim 18:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 8.

Regarding claim 19:

The rejection of base claim 15 is incorporated. All the limitations of this claim have been noted in the rejection of claim 7.

Regarding claim 21:

The rejection of base claim 20 is incorporated. All the limitations of this claim have been noted in the rejection of claim 7

Regarding claim 22:

The rejection of base claim 20 is incorporated. All the limitations of this claim have been noted in the rejection of claim 6.

Regarding claim 23:

Fish and Tonomura disclose *the device of claim 22, further comprising a plurality of concentrated applications stored in said virtual machine data store.*

(Tonomura further discloses "its interpreter incorporated in the reception side terminal (CPU2), which corresponds to a virtual machine, is designed to directly … execute the compressed code strings ***(plurality of concentrated applications)*** of a

virtual program in order to prevent the execution speed of the intermediate language from being reduced." (Emphasis added – See par. [0075])).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh T. Bui whose telephone number is (571) 270-1976. The examiner can normally be reached on Mon. - Thur., 9:30AM - 4:30PM.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. T. B./
Examiner, Art Unit 2192

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192